WHAT IS CLAIMED IS:

1. A method for determining if wax crystals will form in a solvent at or above a particular temperature comprises taking a sample of said solvent at a temperature high enough for it to be free of wax crystals and cooling it down to said temperature in the presence of a laser beam, and noting if wax crystal formation has occurred at or above said temperature, as determined by whether or not said beam has been reflected at or above said temperature.

2. A method according to claim 1 wherein said cooling in the presence of said laser beam is conducted under conditions that provide relative movement between said sample and beam.

3. A method according to claim 2 wherein said laser beam comprises visible light radiation.

4. A method according to claim 3 wherein said laser beam is focused at a point in said solution.

5. A method according to claim 4 wherein wax crystals passing through said focal point reflect a portion of said beam and wherein said reflections are detected as indicating the presence of wax crystals in said solution.

6. A method for determining the temperature at which wax crystals will form in a solvent in which said wax is dissolved comprises cooling said solvent in the presence of a laser beam emitted into and focused at a point in said solvent, under conditions that provide relative movement between said beam and solvent, and recording the temperature at which the formation of wax crystals reflects said beam.

7. A method according to claim 6 wherein said laser beam comprises visible light radiation.

8. An on-line method for determining if wax crystals will form in a hot, recovered dewaxing solvent at a particular temperature, comprises taking a slipstream of said hot solvent from a solvent line and passing it through a solvent loop containing a sample chamber and into said chamber without exposing said solvent to ambient, wherein said loop is attached and adjacent to said line, and cooling said sample in said chamber in the presence of wax crystal detection means comprising a laser beam that is reflected by wax crystals focused at a point in said sample under conditions that provide relative movement between said beam and sample, wherein forming wax crystals passing through said focal point reflect said beam, wherein said reflections are detected and recorded as indicating the presence of wax crystals, and wherein if said wax crystals do not form at a temperature above said particular temperature, continuing said cooling until said temperature has been reached and noting whether or not wax crystals have formed at said temperature.

9. A method according to claim 8 wherein said laser beam comprises visible light radiation.

10. A method according to claim 9 achieved automatically from a remote control point.

11. A method according to claim 10 wherein said sample is cooled until said wax crystals form.

12. A solvent dewaxing process comprises:

(a) contacting a waxy oil with cold dewaxing solvent to form a dewaxed oil and wax, both of which contain said dewaxing solvent;

(b) heating said solvent containing dewaxed oil and wax and then passing same to separate solvent recovery fractionaters to separate and recover said solvent;

(c) passing said hot recovered dewaxing solvent produced in (b) into a solvent line that passes it to solvent chillers downstream of said fractionaters and wherein said hot solvent is cooled back down to the cold dewaxing temperature in said chillers and recycled back to solvent dewax more waxy oil;

(d) passing a slipstream of said hot recovered solvent from said line upstream of said chillers into a solvent loop containing a sample chamber and into said chamber without exposing said sample to the ambient, wherein said chamber contains wax crystal detecting means comprising a laser beam that is reflected by wax crystals focused at a point in said sample in said chamber, wherein wax crystals forming in said sample that pass through said focal point reflect said beam, and wherein said reflections are detected and recorded as indicating the presence of said wax crystals in said sample, and

(e) cooling said sample in said chamber under conditions of relative motion between said beam and sample down to a predetermined temperature or until wax crystals form and are detected, and recording the temperature at which they form under conditions that provide relative movement between said beam and sample.

13. A dewaxing process according to claim 12 wherein the temperature at which said wax crystals form is automatically recorded an wherein if the temperature at which said wax crystals form is too high, one or more operators are alerted and corrective measures are taken upstream of said chillers to prevent them from being fouled with wax.

14. A dewaxing process according to claim 13 wherein said laser beam comprises visible light radiation.

15. A dewaxing process according to claim 14 wherein said solvent loop is attached and adjacent to said solvent line.

16. A dewaxing process according to claim 15 wherein said steps (d) and (e) are accomplished by remote control at a control point remote of said solvent loop and chamber.

17. A dewaxing process according to claim 16 wherein said steps (d) and (e) are automatically repeated at predetermined intervals.

18. A dewaxing process according to claim 17 wherein said solvent sample is passed back into said solvent line via said loop after steps (d) and (e) have been achieved.

19. A dewaxing process according to claim 18 wherein said sample in said chamber is at the same conditions of temperature and pressure as said hot solvent in said line before it is cooled.

20. A dewaxing process according to claim 19 wherein said dewaxed oil comprises a lubricating oil fraction.